

Material Examined.—Holotype male, 17 paratype females, and 1 paratype slide of first stage larvae, Zanzibar, Indian Ocean, British East Africa, February, 1959, ex *Pseudotheraptus wayi* Brown, F. L. Vanderplank collector. Also, 2 females in situ on the host, collected on Zanzibar by B. H. Hyde-Wyatt. The 2 females are located, one on either side, above the hind coxa, the cephalothorax exerted from between the bug's thorax and abdomen.

Systematics.—The male of this species differs from others known by the combination of compact antennae, no sensoria on the 2 basal antennal segments but many on the terminal palpal segment, the broad separation of the prescutum and scutellum, and the non-excavated mid and hind tibiae. In my key to the genus *Halictophagus* (Bohart, 1943) it runs to *omani* Bohart except for the palpal sensoria, fewer eye facets, and larger size. There is superficial similarity to *H. javanensis* (Pierce) from Java, and *H. paradeniya* (Pierce) from Ceylon. The mouthparts of *zanzibarae* are much shorter than those of *paradeniya*, the tibiae are not excavated as in *javanensis*, and the scutellum is more broadly rounded than in the other two species, which were figured by Pierce (1918). The female is unique by the great length of the cephalothorax and the nearly circular opening to the brood canal.

REFERENCES

- Bohart, R. M., 1943. New species of *Halictophagus* with a key to the genus in North America. *Ann. Ent. Soc. Amer.* 36:341-359.
- Brown, E. S., 1955. *Pseudotheraptus wayi*, a new genus and species of coecid injurious to coconuts in East Africa. *Bull. Ent. Res.* 46:221-240.
- Pierce, W. D., 1918. The comparative morphology of the order Strepsiptera together with records and descriptions of insects. *Proc. U. S. Natl. Mus.* 54: 391-501.

A NEW XENOTARSONEMUS WITH A NOTE ON *X. VIRIDIS* (EWING) (ACARINA: TARSONEMIDAE)

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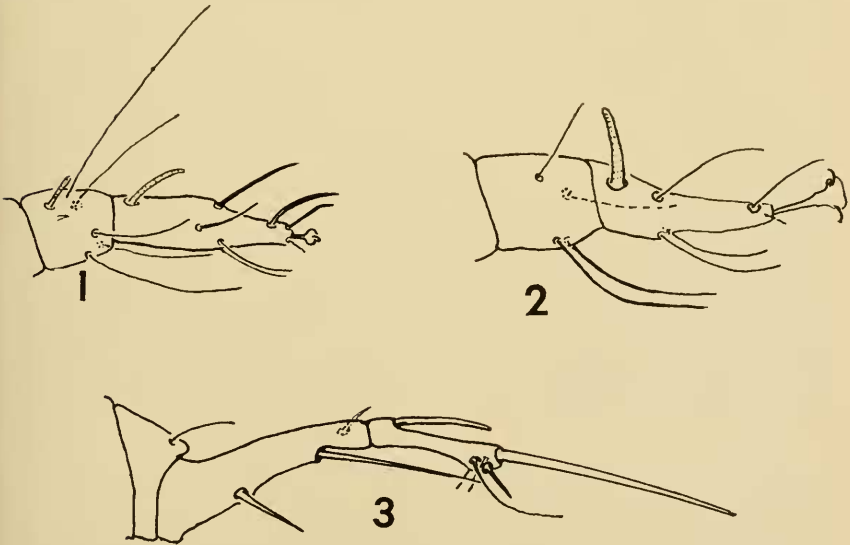
Including the species described below, the genus *Xenotarsonemus* contains four species and nothing certain is known of the feeding habits of any of them.

Xenotarsonemus viridis (Ewing), described from specimens collected on strawberry leaves by F. F. Smith in Maryland, October 1933, had not until recently been recollected. In August 1960, the writer collected two male tarsonemids on *Commelina communis* growing at an elevation of about 2700 feet near Erwin, Tennessee; when it was found that the mites were *X. viridis* an extensive search was

made in the same area for more specimens. A large amount of leaves and stems of *C. communis* and other herbaceous vegetation, including *Fragaria*, was examined over a period of about a month. Not another specimen of *viridis* was seen.

KEY TO THE SPECIES OF XENOTARSONEMUS (MALES)

1. Leg IV with the large sensory rod of tibiotarsus extending beyond distal end of tibiotarsus 2
 Leg IV with the large sensory rod of tibiotarsus not extending beyond distal end of tibiotarsus 3
2. Femur IV with dorsal seta about twice as long as first ventral seta.....
 *viridis* (Ewing)
 Femur IV with dorsal seta about two-thirds as long as first ventral seta
 *cadeae* Cromroy
3. Tibiotarsus about 2½ times as long as wide, sensory rod situated at about mid-length of segment *denmarki* Beer
 Tibiotarsus over 4 times as long as wide, sensory rod situated near anterior end of segment *butcheri*, n. sp.



Xenotarsonemus butcheri, n. sp., male. Fig. 1, tibia and tarsus of leg I; fig. 2, tibia and tarsus of leg II; fig. 4, leg IV.

Xenotarsonemus butcheri, n. sp.
 (Figures 1-3)

Xenotarsonemus butcheri resembles *X. denmarki* Beer, 1960, but differs from that species in having most of the dorsal setae longer,

the sensory rods of tarsi I and II tapering from base to tip, a much more slender tibiotarsus, and in other characters. The female is unknown.

Male.—Body ranging in color from amber to black; length from tip of palpus to distal end of genital papilla 132.¹

Dorsal chaetotaxy.—Propodosomal setae arranged as in *X. denmarki* and of the following lengths from front to rear: 25, 23-32, 42, 38; hysterosomal setae 29-45-58, 56-68, and 11 long, first (the humeral) near side of body and about 7 from main body suture; second in line with and about midway between first and third (distance between first and third 37); third pair situated mediolaterally, their bases 18 apart; fourth pair situated at outer basal edge of genital papilla and 11 apart.

Ventral chaetotaxy.—First propodosomals 5 long, 11 apart and 3 behind apodemes I; second propodosomals 7 long, 14 apart, and 3 to 6 behind apodemes II; first hysterosomal 16 long, second 12 long situated as for *denmarki*.

Apodemes.—Anterior median apodeme distinct to and joining with apodemes II, apodemes II together forming an even transverse arc; anterior median apodeme posterior of apodemes II indistinct as are the transverse apodemes; apodemes III straight, without medially directed extensions at anterior ends.

Legs.—Tarsus I and tibia I with setae and annulated sensory rods as shown in figure 1, sensory rod of tarsus 7 long, that of tibia about 4.5 long; tarsus II and tibia II with setae and annulated sensory rod as shown in figure 2, sensory rod tarsus 8 long and noticeably coarser than sensory rod of tarsus I. Leg IV as shown in figure 3, femur 26 long, anterior ventral seta 8 long, posterior ventral seta 18-23 long, dorsal seta about 6 long; tibiotarsus 16 long, 2.5 wide at narrowest part, dorsal sensory rod 9 long, large subterminal seta 26-33 long.

Holotype.—Male, Everglades National Park, Florida, March 7, 1959 (D. De Leon), on *Kosteletzkya* sp. *Paratypes*.—2 males, collected with the above male. The species is named for Dr. F. Gray Butcher of the University of Miami, Coral Gables, Fla. A paratype will be deposited in the University of Florida Collections, Gainesville; the other two specimens are in the author's collection.

REFERENCES

- Beer, R. E., 1960. A new species of *Xenotarsonemus* from Florida. Fla. Ent. 43(1):23-27.
- Cromroy, H. E., 1958. A preliminary survey of the plant mites of Puerto Rico. Jour. Agr. Univ. Puerto Rico. 42(2):39-144.
- Ewing, H. E., 1939. A revision of the mites of the subfamily Tarsoneminae of North America, the West Indies and the Hawaiian Islands. U.S.D.A. Tech. Bull. 653, 63 pp.

¹ In the following description all measurements are given in microns.